

posterior angles. These depressions are more sharply defined than the similar depressed areas in *I. indigacea*. Length $6\frac{1}{2}$ mm.

Hab. Basilan (*C. F. Baker*: 11908).

Closely allied to *I. indigacea* Pasc. but differing in colour and in the uniformly dark antennae. From *I. basalis* Waterh., from Java, which has similarly bicolorous elytra and dark antennae, it differs in its larger size, in the testaceous colour of the fore part of the body, and in the deep blue instead of brown apical half of the elytra.

2. *Ischalia philippinus*, sp. n.

Upper side testaceous, with a broad spear-shaped sutural brown patch on the elytra which reaches neither the base nor the apex. Under side of pro- and mesothorax testaceous, of metathorax and abdomen piceous with a dark blue metallic tint; antennae and legs piceous, the former almost black, both with slight dark blue metallic reflexions. Thorax campanulate, the sides not angulate in the middle. Length $6\frac{1}{2}$ mm.

Hab. Mt. Makiling, Luzon (*C. F. Baker*: 6035).

Closely allied to *I. dimidiata* in structure, differing chiefly in colour and in the shape of the thorax, the disc of the latter with vaguely defined impressions similar to those of *I. indigacea*.

April 19th, 1920.

DIMORPHISM IN THE ANTENNAE OF A MALE MIDGE.

BY F. W. EDWARDS, B.A., F.E.S.

Dimorphic males are of very rare occurrence in the Diptera,* even among those species which have strongly-developed secondary sexual characters. The following case, which has recently come under my notice, may therefore be of some interest.

The species concerned is *Trichocladius ephippium* Zett. (*Cricotopus ephippium* of Verrall's List of British Diptera), a Chironomid fly which is found abundantly in all parts of Britain. It occurs in great numbers by the river Ivel at Radwell, Herts, and I have frequently collected normal males and females there. As is usual in this subfamily, the males have 14-jointed strongly plumose antennae, while the females have them shorter, 7-jointed, and with only a few short hairs; the basal joint is smaller than in the male, and the following joints bear special "taste-bristles."

* Examples are to be found in certain *Seiarinae* (*Payzia scabiei*), the males of which have dimorphic wings: another possible case is Kieffer's *Forcipomyia heterocera*, described from a male with antennae resembling those of a female. The eye-stalks of *Achias* are variable in length but not truly dimorphic.

On March 7th of this year, at the place mentioned, I noticed on a fence what appeared at first sight to be a female of this species, but on being closely observed it was seen to possess male genitalia. I then examined the fence rather closely and found scores of similar specimens, as well as numerous normal males and females. Subsequently, I found others at Oughton Head, near Hitchin, and again at Radwell on April 25th, when all three forms were present in large numbers. On examining material collected here in 1918, I found a single male among a number of females, besides normal males.

The males with short antennae were at first thought to be a distinct species, but close examination failed to reveal the slightest difference between their genitalia and those of normal males, the only differences observable in other parts of the body being those usually associated with sex. The antennae of the short-horned males are absolutely identical in structure, down to the details of the hairs and "taste-bristles," with those of the females. The normal males vary in colour, the mesonotum usually being shining black, with yellowish shoulders, though in some specimens there are three separate black stripes. In the females, and in the short-horned males, the stripes are always well separated. Also, in these abnormal males the abdomen is shorter than usual and looks at first sight more like that of the female.

All the short-horned males were taken sitting on the fence, and none were observed swarming, though swarms of normal males were observed at the same time. Copulation was not observed.

The short-horned males evidently constitute a definite form, and are not mere sports, since they occur in large numbers.

May 10th, 1920.

Hetaerius ferrugineus Ol. in the Isle of Wight.—A single example of this rare myrmecophilous insect was found by me in an ant's nest at Luccombe Chine, I. of W., on April 7th last. The record is new to the list of the island Coleoptera, and the only capture for Britain of late years is that by Mr. Bedwell at Box Hill (Ent. Mo. Mag. 1909, p. 165).—C. E. STOTT, "Eaton," Reigate: April 20th, 1920.

Note on the life-history of Triecphora vulnerata Illiger (Homoptera, Cercopidae).—Through Mr. L. E. Robinson, A.R.C.S., of the Quick Laboratory, Cambridge, I have received a number of nymphs and adults of this conspicuously coloured "frog-hopper," which were found in a cavity in the ground. It appears, on inquiring of Mr. James Edwards, that the early stages of this insect are not well known, hence the following particulars may be worth placing on record.

The colony was found on May 1st, 1920, by Mr. J. Philbrick, of Watford, Herts, to whom I am indebted for the following detailed report. It was